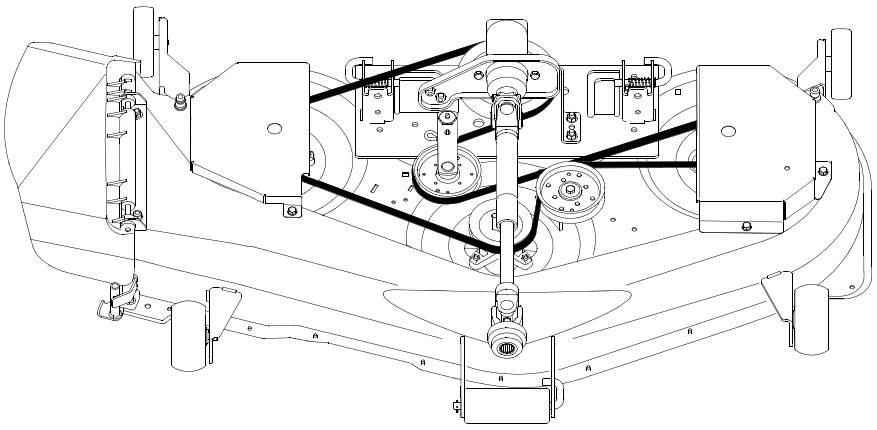
Cub Cadet®

Operator's Manual

50" MOWER DECK

For Series 3000 Tractors



INSTALLATION AND MAINTENANCE INSTRUCTIONS

Model Number

394

190-394-100

IMPORTANT:

READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

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PRINTED IN U.S.A.

FORM NO. 769-01516
(10/04)

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WARNING

- The engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
- This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered, or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.
- In the State of California, the above is required by law (Section 4442 of the California Public Resources Code). Other States may have similar laws. Federal laws apply to federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

IMPORTANT

SAFE OPERATION PRACTICES

THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL– **HEED ITS WARNING**.

DANGER Your lawn mower was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in injury. This lawn mower is capable of amputating hands and feet or throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

I. GENERAL OPERATION

1. Read, understand and follow all instructions in the manual and on the machine before starting. Keep this manual in a safe place for future and regular reference.
2. Only allow responsible individuals familiar with the instructions to operate the machine. Know the controls and how to stop the machine quickly.
3. Do not put hands or feet under the cutting deck or near rotating parts.
4. Clear the area of objects such as rocks, toys, wire, etc. which could be picked up and thrown by the blades. A small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury to you or a bystander. To help avoid a thrown objects injury, keep children, animals, bystanders and helpers at least 75 feet from the mower while it is in operation. Always wear safety glasses with side shields or safety goggles during operation or while performing an adjustment or repair, to protect eyes from foreign objects. Stop the blades when crossing gravel drives, walks or roads.

5. Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
6. Never carry passengers.
7. Disengage the blades before shifting into reverse and backing up. Always look down and behind before and while backing.
8. Be aware of the mower and attachment discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the chute guard in place.
9. Slow down before turning. Operate the machine smoothly. Avoid erratic operation and excessive speed.
10. Never leave a running machine unattended. Always turn off the blades, place the transmission in neutral, set the parking brake, stop the engine and remove key before dismounting.
11. Turn off blades when not mowing.
12. Stop the engine and wait until the blades come to a complete stop before (a) removing the grass catcher or unclogging chute, or (b) making any repairs, adjusting or removing any grass or debris.
13. Mow only in daylight or good artificial light.
14. Do not operate the machine while under the influence of alcohol or drugs.
15. Watch for traffic when operating near or crossing roadways.
16. Use extra care when loading or unloading the machine into a trailer or truck. This unit should not be driven up or down a ramp onto a trailer or truck under power, because the unit could tip over causing serious personal injury. The unit must be pushed manually on a ramp to load or unload properly.
17. Never make a cutting height adjustment while the engine is running if the operator must dismount to do so.
18. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Do not wear loose fitting clothes or jewelry. They can be caught in moving parts. Never operate a unit in bare feet, sandals or sneakers.
19. Check overhead clearance carefully before driving under power lines, wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
20. Disengage all attachment clutches, thoroughly depress the brake pedal and shift into neutral before attempting to start the engine.
21. Your mower is designed to cut normal residential grass of a height no more than 10". Do not attempt to mow through unusually tall, dry grass (e.g. pasture) or piles of dry leaves. Debris may build up on the mower deck or contact the engine exhaust presenting a potential fire hazard.
22. Use only accessories approved for this machine by *Cub Cadet*. Read, understand and follow all instructions provided with the approved accessory.

II. SLOPE OPERATION

Slopes are a major factor related to loss of control and tip-over accidents, which can result in severe injury or death. **All** slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.

DO:

Mow up and down slopes, not across. Exercise extreme caution when changing directions on slopes.

Remove obstacles such as rocks, limbs, etc.

Watch for holes, ruts or bumps. Uneven terrain could overturn the machine. **Tall grass can hide obstacles.**

Use slow speed. Choose a low enough gear so that you will not have to stop or shift while on the slope. Always keep the machine in gear when going down slopes to take advantage of engine braking action.

Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.

Use extra care with grass catchers or other attachments. These can change the stability of the machine.

Keep all movement on the slopes **slow** and **gradual**. Do not make sudden changes in speed or direction. Rapid engagement or braking could cause the front of the machine to lift and rapidly flip over backwards, which could cause serious injury.

Avoid starting or stopping on a slope. If the tires lose traction, disengage the blades and proceed slowly **straight** down the slope.

DO NOT:

Do not turn on slopes unless necessary; then, turn slowly and gradually downhill, if possible.

Do not mow near drop-offs, ditches or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

Do not mow on wet grass. Reduced traction could cause sliding.

Do not try to stabilize the machine by putting your foot on the ground.

Do not use the grass catcher on steep slopes.

Do not tow heavy pull behind attachments (e.g. loaded dump cart, lawn roller) on slopes greater than 5 degrees. When going downhill, the extra weight may cause you to loose control and possibly overturn the tractor.

III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. They do not understand the dangers. **Never** assume that children will remain where you last saw them.

1. Keep children out of the mowing area and in watchful care of an adult other than the operator.
2. Be alert and turn the machine off if children enter the area.
3. Before and when backing up, look behind and **down** for small children.
4. Never carry children, even with the blades off. Children may fall off and be seriously injured or may interfere with safe machine operation.
5. Use extreme care when approaching blind corners, doorways, shrubs, trees or other objects that may block your vision of a child who may run into the machine.
6. To avoid back-over accidents, always disengage the cutting blades before shifting in reverse. The "Reverse Caution Mode" should not be used when children or others are around.
7. Keep children away from hot or running engines. They can suffer burns from a hot muffler.
8. Remove the key when the machine is left unattended to prevent unauthorized operation.

Never allow children under 14 years old to operate the machine. Children 14 years and over should only operate the machine under close parental supervision and proper instruction.

IV. SERVICE

1. Use extreme care in handling gasoline and other fuels. They are extremely flammable and the vapors are explosive.
   a. Use only an approved container.
   b. Never remove fuel cap or add fuel with the engine running. Allow the engine to cool at least two minutes before refueling.
   c. Replace the fuel cap securely and wipe off any spilled fuel before starting the engine as it may cause a fire or explosion.
   d. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
   e. Never refuel the machine indoors because fuel vapors will accumulate in the area.
   f. Never store the fuel container or machine inside where there is an open flame or spark, such as a gas hot water heater, space heater or furnace.
2. Never run a machine inside a closed area.
3. To reduce fire hazard, keep the machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage. Allow the machine to cool at least 5 minutes before storing.
4. Before cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the spark plug to prevent accidental starting.
5. Check the blade and engine mounting bolts at frequent intervals for proper tightness. Also visually inspect blades for damage (e.g., excessive wear, bent, cracked). Replace with blades which meet original equipment specifications.
6. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
7. Never tamper with safety devices. Check their proper operation regularly. Use all guards as instructed in this manual.
8. After striking a foreign object, stop the engine, remove the wire from the spark plug and thoroughly inspect the mower for any damage. Repair the damage before restarting and operating the mower.
9. Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. For your safety protection, frequently check the components and replace with manufacturer's recommended parts when necessary.
10. Mower blades are sharp and can cut. Wrap the blades or wear gloves, and use extra caution when servicing blades.
11. Check brake operation frequently. Adjust and service as required.
12. Muffler, engine and belt guards become hot during operation and can cause a burn. Allow to cool down before touching.
13. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.

14. Observe proper disposal laws and regulations. Improper disposal of fluids and materials can harm the environment and the ecology.
    a. Prior to disposal, contact your local Environmental Protection Agency to determine the proper method for disposing of the waste. Recycling centers are established to properly dispose of materials in an environmentally safe fashion.
    b. Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them. Properly dispose of the containers immediately following the draining of fluids.
    c. DO NOT pour oil or other fluids into the ground, down a drain or into a stream, pond, lake, or other body of water. Observe Environmental Protection Agency regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, tires and other harmful waste.
15. With the exception of utilizing the deck wash feature, we do not recommend the use of a pressure washer or garden hose to clean your tractor. Water may cause damage to electrical components; pulleys; bearings; or the engine. The use of water will result in shortened life and reduce serviceability.

WARNING - YOUR RESPONSIBILITY: Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

TO THE OWNER

Contained in this manual are instructions covering installation and maintenance of the 50 inch Model 190-394 mower deck.

Information provided will guide you through the preparation, installation and removal processes. Proper completion of the adjustment procedures will help to ensure optimal performance from the mower deck.

Maintenance procedures outlined in this manual, if performed as instructed, will provide for a continued high level of performance and prolonged service life from the mower deck.

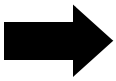
Throughout this manual, the reader will be directed to refer to various figures. These figures depict and indentify parts which are relevant to the associated text. Careful attention to these figures will greatly assist the reader during both installation and maintenance processes.

If you have difficulties with the attachment, have questions regarding the operation or maintenance of this equipment, or desire additional information not found in the manual, contact your dealer. If you need help locating a dealer in your area, contact the Customer Dealer Referral Line by calling:

1-877-282-8684

Or you may contact Cub Cadet via the internet by logging on to our Web Site at:

www.cubcadet.com



NOTE

References to LEFT and RIGHT indicate that side of the tractor when facing forward while seated in the drivers seat. Reference to FRONT indicates the grille end of the tractor; to REAR, the drawbar end.

SECTION I. TRACTOR AND DECK PREPARATION

A. DECK PREPARATION

WARNING

When handling the mower deck, be careful not to cut yourself on the sharp blades.

Remove the top and break down the sides of the crate to remove the deck assembly from the shipping container. Cut the tie strap securing the front drive shaft to the deck assembly. Remove all padding material from the drive shafts. Refer to Figure 1.

WARNING

Never operate the mower deck without the chute deflector installed and in the down position.

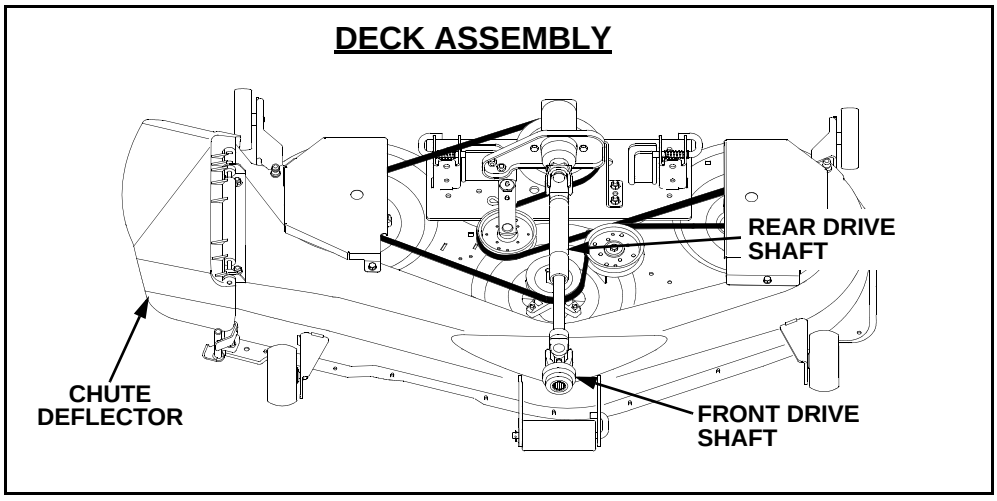


Figure 1

B. TRACTOR PREPARATION

The mower deck front lift bracket/rod assembly is shipped on the tractor. If not already done, cut the tie strap securing the front lift bracket/rod assembly to the front of the tractor frame. Pull the center of the tractor's quick latch rod downward to remove the lift bracket/rod assembly from the tractor. See Figure 2.

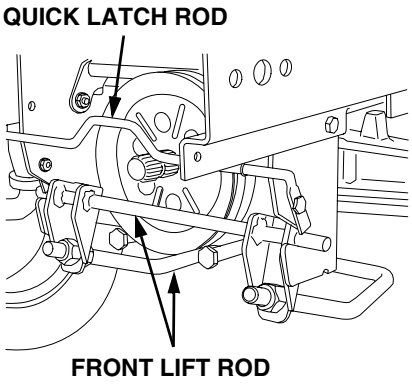


Figure 2

WARNING

Place the tractor on a level surface and engage the parking brake lever.

NOTE

Tractors built Mfg. Code 1K060G and after are equipped with a deck downstop feature. In the raised position, the downstop will prevent the lift links from being adequately lowered to allow installation of the deck. If the deck is being installed on a tractor which does not have the downstop feature, skip the following step 1 and go to step 2.

1. If installing the deck on a tractor with the deck downstop feature, make certain the downstop is in the lowered position as follows (See Figure 3):
   a. If necessary, use the tractor's lift handle to raise the center lift and relieve any pressure from the downstop arm.
   b. Lower the deck downstop by continuously turning the height adjustment knob counterclockwise.

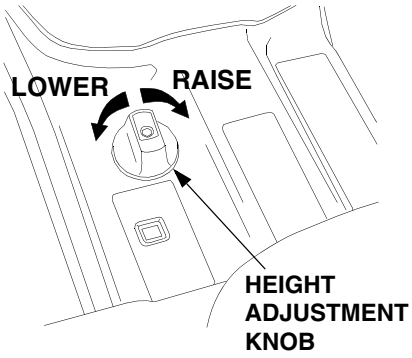


Figure 3

2. The left lift link of the tractor must be raised to provide clearance for sliding the mower deck under, or out from under, the tractor. Referring to figures 4A through 4D, lock the left lift link in its *deck installation position* as follows:
   a. Use the tractor lift system lever to lower the lift links. Stop the tractor engine.
   b. Holding the left lift rod downward, lift upward on the release tab of the lift stop bracket while raising the rearward end of the lift link to align the notch of the rod with the slot of the link (See Figures 4A and 4B).
   c. Swing the lift rod forward until fully to the front of the lift link slot (See Figures 4C and 4D).

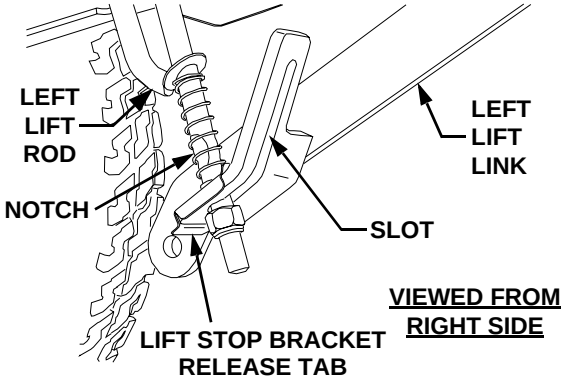


Figure 4A

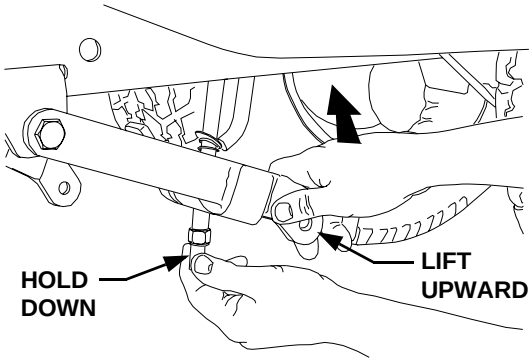


Figure 4B

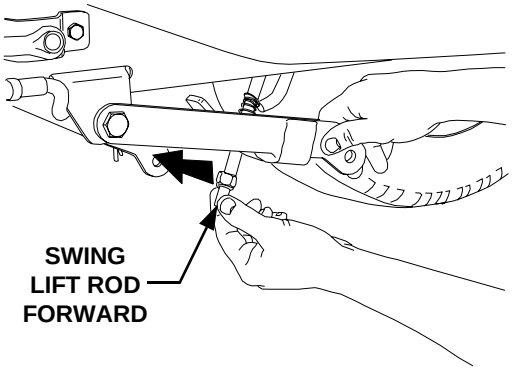


Figure 4C

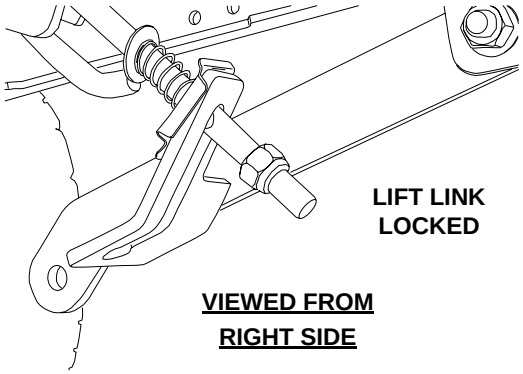


Figure 4D

SECTION II. INSTALLATION AND REMOVAL OF MOWER DECK

A. INSTALLATION OF DECK

After locking the left lift link as described in **Section I** , start the tractor and use the hydraulic lift to fully raise the left lift link (See Figure 5). Stop the engine.

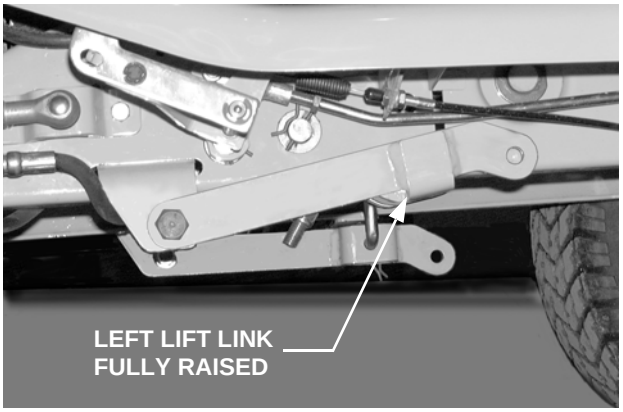


Figure 5

Adjust the mower deck to its lowest setting as follows:

1. Remove the hex flange lock nut from the shoulder screw securing the gauge wheel to the deck index bracket. See Figure 6.
2. Insert the shoulder screw w/gauge wheel into the highest of the four index holes (lowest deck setting) and secure with the hex flange lock nut. See Figure 6.
3. Repeat the previous two steps to re-position the remaining three gauge wheels.

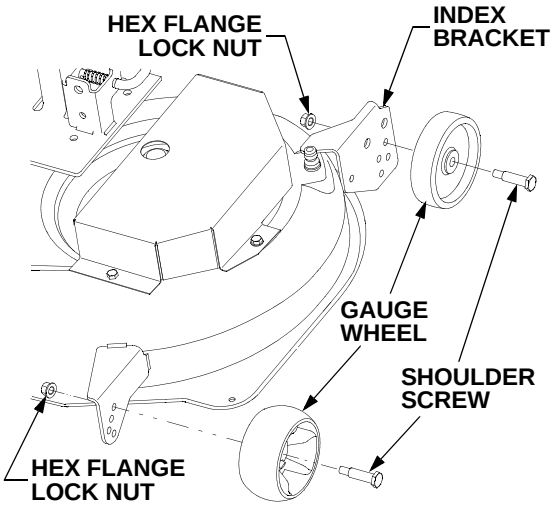


Figure 6

Install the mower deck on the tractor as follows:

1. Place the tractor and mower deck on a firm and level surface. Position the mower deck on the ***left*** side of the tractor with the front of the deck toward the front of the tractor.

WARNING

Before installing the mower deck, place the PTO switch in the “OFF” position, engage the parking brake lever, and turn ignition key to the “OFF” position. ALWAYS stop the engine after utilizing the tractor hydraulic lift system. When handling the mower deck, be careful not to cut yourself on the sharp blades.

2. Slide the deck under the tractor until the slots of the LH and RH rear deck brackets align approximately with the tractor lift links. Refer to Figure 7.
3. Pull outward and cock the deck support pins in the rear deck brackets so that both spring-loaded pins are held in the disengaged position against the inner surface of the deck brackets.

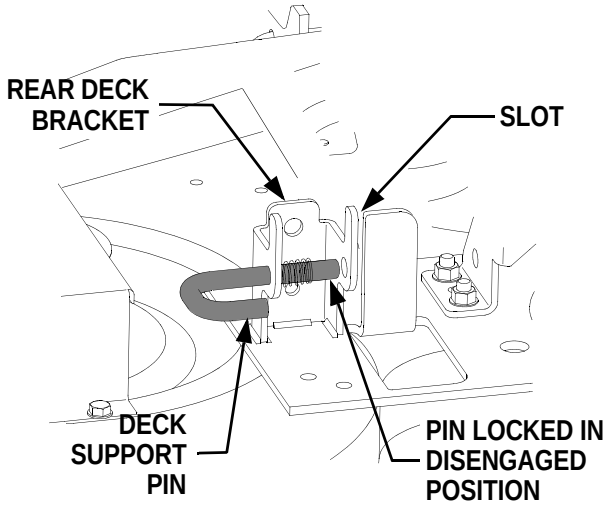


Figure 7

4. Use the tractor lift system to lower the lift links. **NOTE:** *If installing the deck on a tractor with the deck downstop feature, make certain the downstop is in the lowered position (Refer to Section 1).*

5. Unlock the left lift link by sliding the left lift rod fully rearward in the slot of the lift link (See Figure 8).

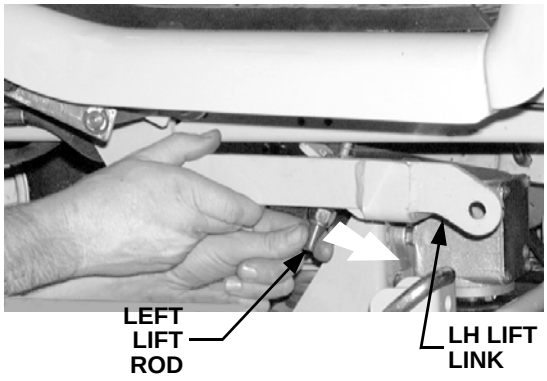


Figure 8

NOTE

The following step 6 applies only to the initial installation of the mower deck on the tractor.

6. Loosen the hex jam nuts on the front lift bracket/ rod assembly and back off (unscrew) the hex lock nuts until approximately 1/2 inch from the ends of the threads (See Figure 9).

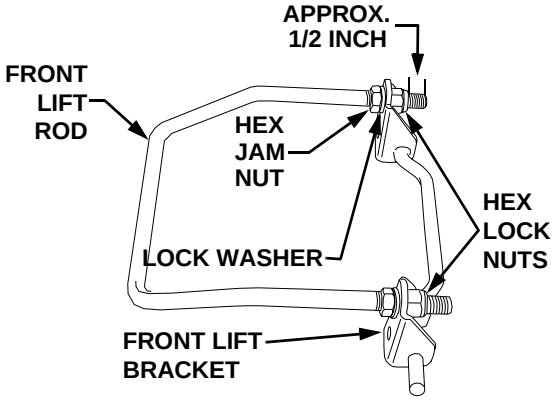


Figure 9

7. From the front of the tractor, slide the outer pins of the front lift bracket into the latch receiver slots of the tractor. Press the lift bracket rearward until both sides are firmly captured in the latch receivers by the quick latch rod (See Figure 10).

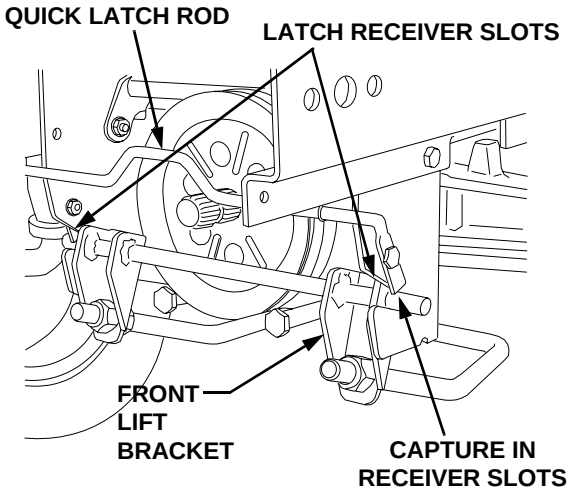


Figure 10

8. From the side of the tractor, raise the front lift rod and roll the deck forward until the lift rod aligns with slots of the deck front roller bracket. Lower the lift rod into the front roller bracket slots and slide the deck rearward to engage the lift rod fully forward in the slots of the roller bracket (See Figure 11).

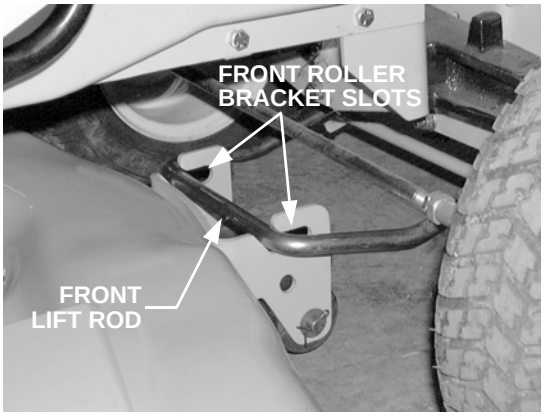


Figure 11

9. Guide the LH and RH lift links into the slots of the rear deck brackets and release the deck support pins by aligning with the inner holes of the deck brackets (See Figure 12) **NOTE:** *The handle of the support pins should be positioned to the rear of the deck brackets as shown in Figure 12.*

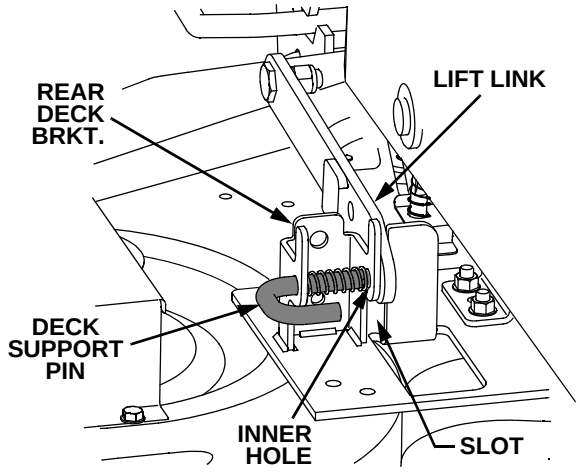


Figure 12

10. Maneuver each side of the deck slightly to align the support pins with the holes of the lift links. The spring tension will push the pins inward and, if aligned, through the hole in each implement lift link (See Figure 13).

    NOTE: *If unable to align the support pins with the lift link holes, loosen the two hex lock nuts on the front lift rod to allow the deck to be moved farther rearward.*

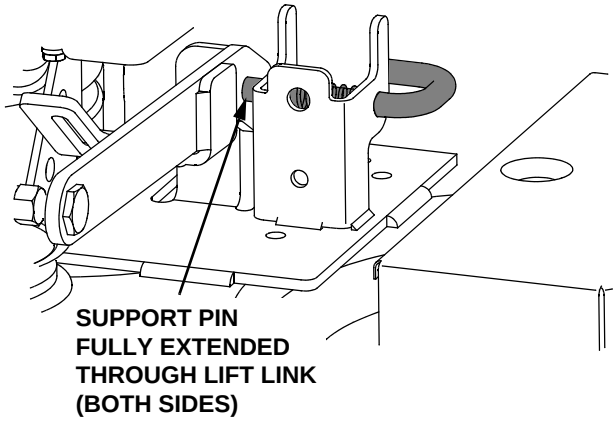


Figure 13

NOTE

The following step 11 applies only to the initial installation of the mower deck on the tractor.

11. Tighten the hex lock nuts on the front lift rod until the rod just contacts the front of both slots in the deck front roller bracket. For now, tighten the hex jam nuts and lock washers until just snug against the front lift bracket. Refer to **Adjustments—Section 3** for final adjustment of front lift rod.

12. Compress the auto-lok collar of the deck drive shaft rearward, then cock to lock the collar in the released position (See Figure 14).

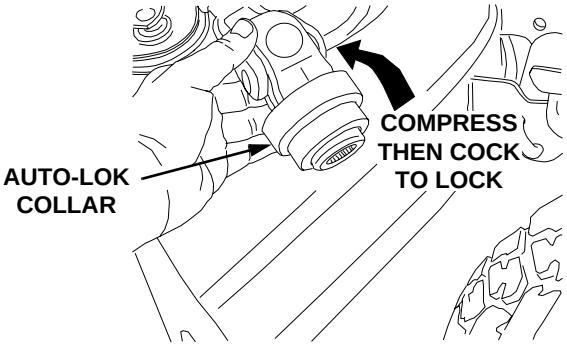


Figure 14

NOTE

If the drive shaft auto-lok collar is in the unlocked position (step 12), it will be necessary to compress and hold the collar rearward when connecting the shaft (step 13).

13. Slide the deck drive shaft fully onto the PTO shaft of the tractor (See Figure 15). The auto-lok collar of the drive shaft should snap into the locked position when the shaft is properly positioned on the PTO shaft.

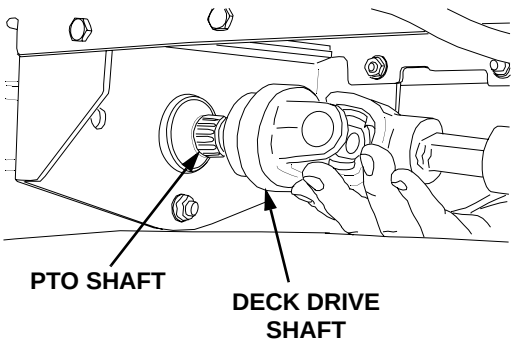


Figure 15

14. Refer to **Adjustments—Section 3** for mower deck leveling adjustment procedures.

B. REMOVAL OF DECK

Place the tractor and mower deck on a firm and level surface with enough room to slide the deck out from the **left** side of the tractor.

WARNING

Before removing the mower deck, place the PTO switch in the "OFF" position, engage the parking brake lever, and turn ignition key to the "OFF" position. Always stop the engine after utilizing the tractor hydraulic lift system. When handling the deck, be careful not to cut yourself on the sharp blades.

1. Support the deck drive shaft to prevent it from dropping; then pull the auto-lok collar rearward and slide the drive shaft off of the PTO shaft (See Figure 14 and Figure 15).
2. Check the position of the deck gauge wheels. If not in their highest position (lowest deck position), proceed as follows:
   a. Use the tractor hydraulic lift system to lift the mower deck so that the gauge wheels are off the ground. Stop the engine.
   b. Remove the hex flange lock nuts and shoulder screws w/gauge wheels from the deck index brackets; then reposition in the highest index hole of the index brackets. Refer to Figure 6.
3. Use the tractor lift system to lower the deck to the ground. **NOTE:** *If removing the deck from a tractor with the deck downstop feature, make certain the downstop is in the lowered position (Refer to Section 1).*
4. Pull outward and cock the deck support pins in the deck hanger brackets so that both spring-loaded pins are held in the disengaged position against the inner surface of the deck brackets (Refer to Figure 7).
5. Lock the left lift link in its deck installation/removal position as follows:
   a. Holding the left lift rod downward, lift upward on the release tab of the lift stop bracket while raising the rearward end of the lift link to align the notch of the rod with the slot of the link (See Figures 4A and 4B).
   b. Swing the lift rod forward until fully to the front of the lift link slot (See Figures 4C and 4D).
6. Use the hydraulic lift to fully raise the LH and RH lift links (Refer to Figure 5). Stop the engine.
7. Roll the deck forward to disengage the front lift rod from the slots of the front roller bracket (Refer to Figure 11). Hold the front lift rod upward and slide the deck rearward until the lift rod rests on top of the roller bracket.
8. From the front of the tractor, pull the center of the quick latch rod downward to release the front lift bracket/rod assembly. Slide the front lift bracket assembly from the latch receiver slots of the tractor (Refer to Figure 10).
9. From the left side of the tractor, slide the mower deck out from under the tractor.

SECTION III. ADJUSTMENTS

DECK LEVELING ADJUSTMENTS

In order to achieve even cutting, the mower deck must be properly leveled. This leveling procedure will result in the left and right blades having corresponding cutting-edge-to ground measurements within 1/16 inch of each other. Also, the blades will each have a 1/8 to 1/4 inch downward tilt toward the front of the tractor. To level the mower deck, proceed as follows:

WARNING

Before making any adjustments, place the PTO switch in the "OFF" position, engage the parking brake lever, and turn the ignition key to the "OFF" position. When adjusting the mower deck, be careful not to cut yourself on the sharp blades.

SIDE TO SIDE LEVELING ADJUSTMENT

NOTE: *Check for proper tire inflation before checking and/or making a leveling adjustment.*

1. Position the tractor on a hard, **level** surface, and use the tractor hydraulic lift system to raise the deck to its highest position. Stop engine.
2. Carefully rotate the outer cutting blades so that they are positioned perpendicular to the tractor frame (See Figure 16).

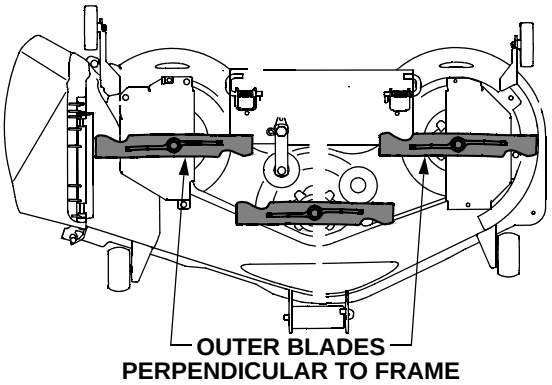
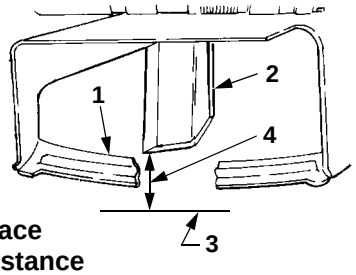


Figure 16

3. Measure and record the distance from the surface to the outer-most cutting edge of the right blade (See Figure 17). Repeat this step for the left blade. If the two blade heights are not within 1/16 inch, the deck must be leveled. Note whether the **left** blade had the *larger or smaller* distance between the cutting edge and level surface. If the two blade heights are within 1/16 inch, proceed to FRONT TO BACK LEVELING.



1. **Finger guard**
2. **Blade**
3. **Hard Level Surface**
4. **Measure This Distance**

Figure 17

4. Side to side leveling is attained by adjusting the hex lock nut on the bottom of the LH lift rod, located below the LH lift link (See Figure 18).

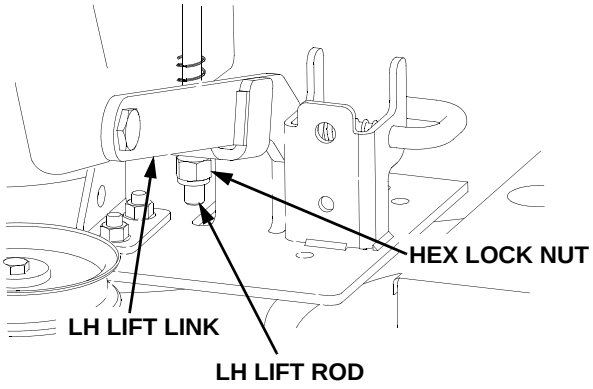


Figure 18

5. Turn the hex lock nut upward (tighten) on the threads of the lift rod to raise the left side of the mower deck. Turn the lock nut down (loosen) on the lift rod threads to lower the left side of the mower deck.
6. Recheck the measurements described in step 3. If the blade measurements are not within 1/16 inch, repeat steps 3 and 5 until the correct measurement is obtained.

FRONT TO BACK LEVELING

The front lift rod must be correctly adjusted to maintain the proper pitch of the deck when mowing uneven terrain.

1. Position the mower blades so the ends of each blade point to the front and the rear of the tractor (Refer to Figure 19).

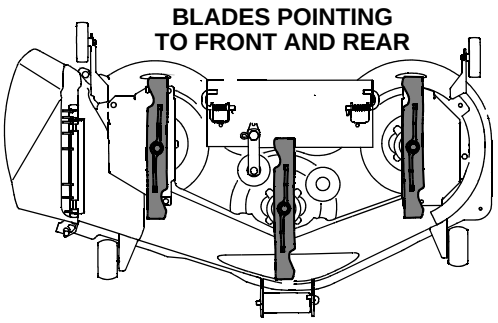


Figure 19

2. Measure and record the distance from the front cutting edge to the ground (measure A), and from the rear cutting edge to the ground (measure B), for both outer blades. The front edge of each blade (measure A) should be lower than its back edge (measure B) by approximately 1/8 to 1/4 inch.See Figure 20.

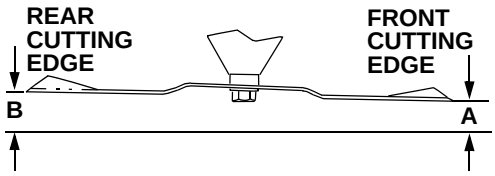


Figure 20

3. Adjust the front lift rod as follows to attain the proper pitch of the mower deck (See Figure 21).
   - Loosen the hex jam nuts and lock washers on the front lift rod.
   - From the front of the tractor, turn the front hex lock nuts clockwise to raise the front of the deck, or counterclockwise to lower the front of the deck.
   - Recheck the measurements described in step 2 and readjust the hex lock nuts until the proper measurements are obtained.

NOTE: *The front lift rod should be fully to the front of both slots in the deck front roller bracket. If one side of the rod does not contact the front of the slot, tighten the corresponding lock nut as needed.*

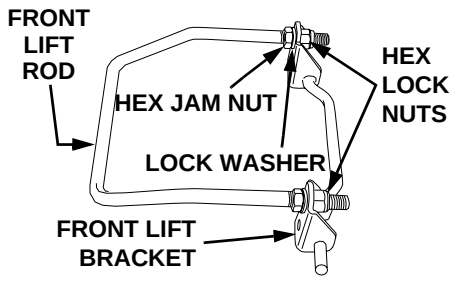


Figure 21

4. Tighten the rear jam nuts and lock washers against the backside of the front lift bracket after adjustment of the rod has been completed.

GAUGE WHEEL ADJUSTMENT

WARNING

Before making any adjustments, place the PTO switch in the “OFF” position, engage the parking brakea, turn the ignition key to the “OFF” position, and remove the key from the switch. When handling the mower deck, be careful not to cut yourself on the sharp blades.

NOTE

Gauge wheel adjustment should be performed only AFTER the mower deck has been properly leveled.

Gauge wheels are intended to prevent scalping of the lawn, and are not to be used to set the cutting height. The gauge wheels should be approximately 1/2" above the ground when the deck is set in the desired cutting height. Do not run the deck on the gauge wheels.

To adjust the height of the gauge wheels, place the tractor on a firm and level surface. Refer to Figure 22, and proceed as follows:

1. Use the tractor lift system to lower the deck to the normally desired mowing height setting, then stop the engine.
2. Remove the gauge wheels by removing the lock nuts and shoulder screws.

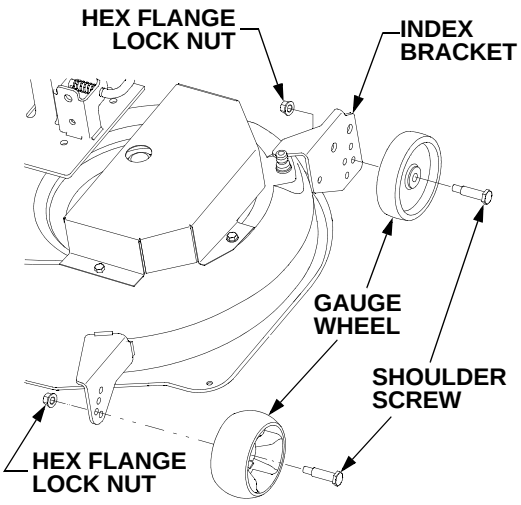


Figure 22

3. Insert the shoulder screw with a rear gauge wheel into the adjustment index hole that provides approximately 1/2" clearance between the wheel and level surface. Secure with the lock nut.
4. Note the position of the index hole used; then install the other gauge wheels into the corresponding index hole of the other guage wheel brackets.

USING HEIGHT ADJUSTMENT KNOB

NOTE

Tractors built Mfg. Code 1K060G and after are equipped with a height adjustment knob which can be used to set the downstop position of the mower deck.

A full rotation of the height adjustment knob equals approx. a 1/4 inch adjustment in the deck height setting. There are four detent positions per rotation. Initially set the deck downstop as follows (See Figure 23):

1. To remove the weight of the deck from the downstop arm, use the tractor lift system to raise the deck.
2. Fully lower the deckstop by continuously turning the height adjustment knob counterclockwise.
3. Use the tractor lift system to lower the deck to the desired height setting, then turn the adjustment knob clockwise until it stops turning freely. Turn the knob to nearest detent position.

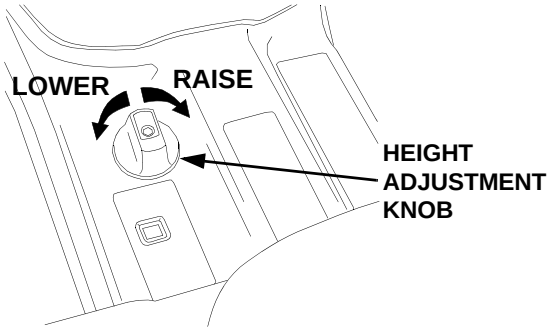


Figure 23

4. Reposition the gauge wheels so that they are appoximately 1/2 inch above the ground.
5. For subsequent minor adjustments from this position, use the tractor lift system to raise the deck, then turn the adjustment knob as necessary to attain the desired height setting (one full turn equals approximately 1/4").

SECTION IV. MAINTENANCE

CLEANING THE DECK

Using The Deck Wash System

WARNING

When using the deck wash system, never engage the deck from any position other than the operator's seat of the tractor. Do not use an assistant or engage deck in the presence of any bystanders.

1. Attach the nozzle adapter to a standard garden hose connected to a water supply.
2. Move the tractor to an area within reach of the hose where the dispersal of wet grass clippings is not objectionable to you. Disengage the PTO, engage the parking brake, and stop the engine.
3. Pull back the lock collar of the nozzle adapter and push the adapter onto one of the deck wash nozzles at either end of the mower deck. Release the lock collar to lock the adapter on the nozzle. See Figure 24.

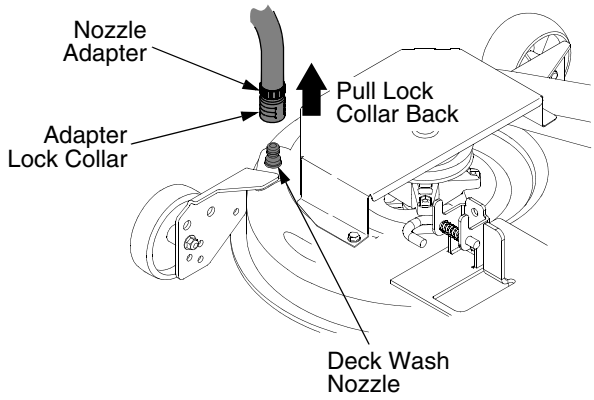


Figure 24

4. Turn on the water supply.
5. From the tractor operator's seat, start the engine and engage the PTO. Allow to run as needed. Disengage the PTO and stop the engine.
6. Turn off the water supply.
7. Pull back the lock collar of the nozzle adapter to disconnect the adapter from the nozzle.
8. Repeat the previous steps to clean the deck using the nozzle at the other end of the deck.

Clean the underside of the mower deck at the end of the mowing season or when buildup of cut material on the underside is noticed.

Once a month remove the spindle covers (Refer to Figure 29) to remove any accumulated grass clippings from around the spindle pulleys and V-belt. Service more often when mowing tall, dry grass.

BLADE CARE

WARNING

Before performing any maintenance, place the PTO switch in the "OFF" position, engage the parking brake, turn the ignition key to the "OFF" position and remove the key from the switch. When servicing the mower deck, be careful not to cut yourself on the sharpened blades.

The cutting blades must be kept sharp at all times. Sharpen the cutting edges of the blades evenly so that the blades remain balanced and the same angle of sharpness is maintained. If the cutting edge of a blade has been sharpened to within 5/8 inch of the wind wing radius (See Figure 25), it is recommended that new blades be installed.

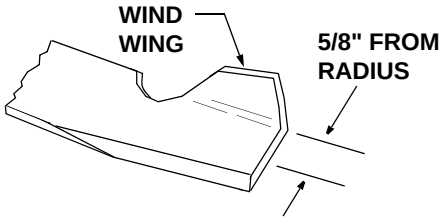


Figure 25

Use a 1-1/8 inch wrench to hold the head of the spindle bolt while loosening the hex nut securing the blade. **NOTE:** *A block of wood may be placed between the deck housing and cutting edge of the blade to assist in removal of the hex nut (See Figure 26).*

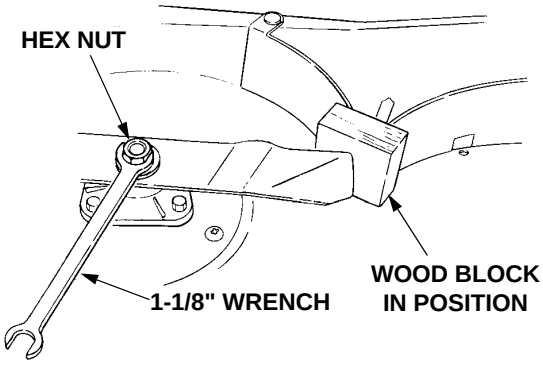


Figure 26

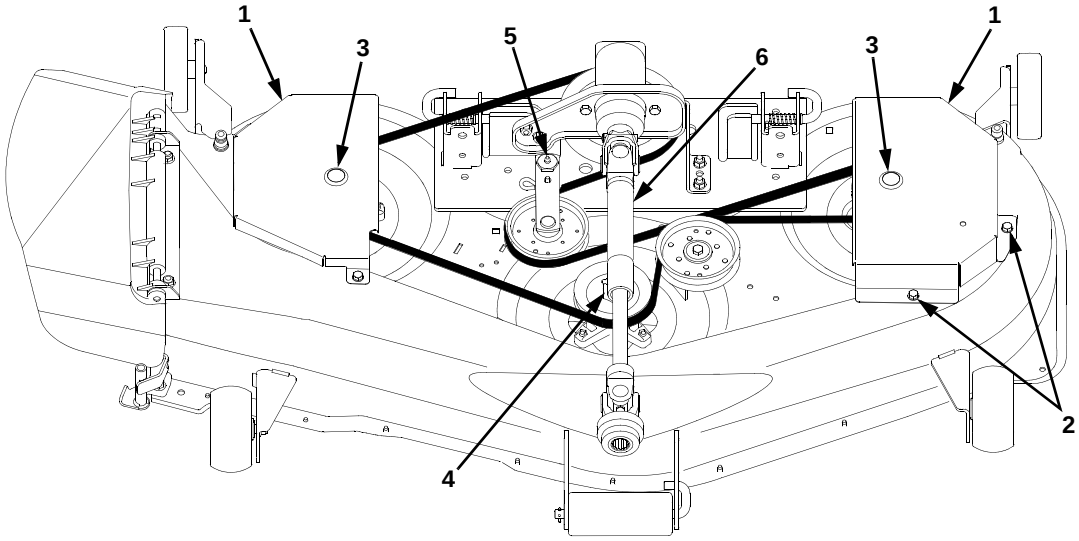
When reinstalling the blades, be sure they are installed so that the wind wings are pointing upward toward the top of the deck. Tighten the nuts to 90 to 110 ft-lbs. (122 to 149 N·m).

After replacing the blades, apply grease to the exposed threads at the bottom of the spindles to prevent rust buildup.

LUBRICATION

After every 10 hours of operation and/or before putting the deck into winter storage, lubricate the spindle assemblies and the spindle belt idler arm with 251H EP grease or an equivalent No. 2 multipurpose lithium grease. The lube fitting for the outer spindles can be accessed by removing the button plugs in the belt covers. Use grease liberally. Excess grease will be expelled from the inverted upper seals of the spindle assemblies. Listen for the muffled crackling noise of grease being expelled through the seal to indicate the spindle assembly is fully greased (Refer to Figure 29).

Apply grease to all other lube fittings after every 50 hours of operation. Refer to **LUBRICATION GUIDE**.



1. **Spindle Cover**
2. **Hex Washer Head Screw**
3. **Button Plugs - Access to Spindle Lube Fitting**
4. **Spindle Assembly Lube Fittings - Underneath Drive Shaft**
5. **Idler Arm Lube Fitting**
6. **Drive Shaft**

Figure 27

SPINDLE BELT REPLACEMENT

A worn spindle belt will affect the cut quality of the mower deck and should be replaced. Referring to Figure 27 and Figure 28, replace the spindle belt as follows:

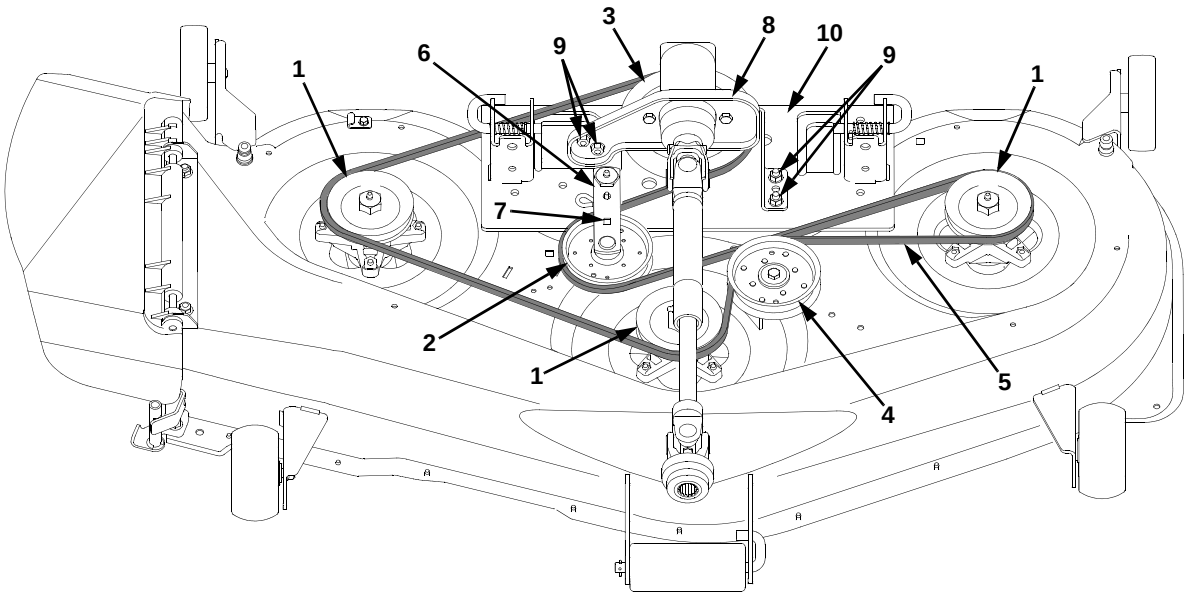
REMOVE SPINDLE BELT

1. Remove the hex washer head screws securing the spindle covers to the deck housing. (See Figure 27).

NOTE

Note the routing of the spindle belt to help ensure proper installation of the new belt.

2. Insert a 3/8” drive ratchet into the square hole of the idler bracket (Refer to Figure 28).
3. Using the ratchet for leverage, pivot the idler bracket toward the left side of the deck to loosen tension on the spindle belt; then roll the belt off the right hand spindle pulley.
4. Slide the belt off the LH spindle pulley; the fixed flat idler pulley; and the center spindle pulley.
5. Slide the belt underneath the movable flat idler pulley on the idler bracket.
6. Remove the four sets of fasteners securing the gear box mounting bracket to the deck mounting plate. Refer to Figure 28.
7. Lift the gear box/mounting bracket assembly and slide the belt off and underneath the drive pulley.
8. Remove the belt from the deck.



1. **Spindle Pulleys**
2. **Movable Flat Idler Pulley**
3. **Drive Pulley**
4. **Fixed Flat Idler Pulley**
5. **Spindle Belt**
6. **Idler Bracket**
7. **Square Hole In Idler Bracket**
8. **Gear Box Mounting Bracket**
9. **Mounting Bracket Fasteners**
10. **Deck Mounting Plate**

Figure 28

INSTALL NEW SPINDLE BELT

1. Lift the gear box/mounting bracket assembly to install the belt around the rear of the drive pulley and through the center opening of the mounting bracket.
2. Install the gear box mounting bracket on the deck mounting plate and secure with the original fasteners removed earlier.
3. Slide the belt underneath the movable flat idler pulley and route the ***backside*** of the belt around the flat idler pulley.
4. Route the belt as follows:
   - around the left spindle pulley
   - around the rear of the fixed flat idler pulley
   - around the front of the center spindle pulley
   - to the right spindle pulley
5. After making certain the belt is properly routed (Refer to Figure 28), insert a 3/8" drive ratchet into the square hole of the idler bracket.
6. Using the ratchet for leverage, pivot the idler bracket toward the left side of the deck to loosen tension and allow the spindle belt to be rolled onto the right hand spindle pulley.
7. Install the spindle covers and secure with the original hex washer head screws removed earlier.

LUBRICATION GUIDE

The life of any machine depends upon the care it is given. Proper lubrication is a very important part of that care.

Be certain that all lubrication fittings are assembled in place, using the lubrication illustration as a guide.

Always lubricate the deck thoroughly before taking it to the field. Use a pressure lubricating gun.

Be sure all fittings are free from dirt and paint so the lubricant is certain to enter the bearing.

Miscellaneous working parts not provided with lubrication fittings should be oiled daily with a good grade of lubricating oil.

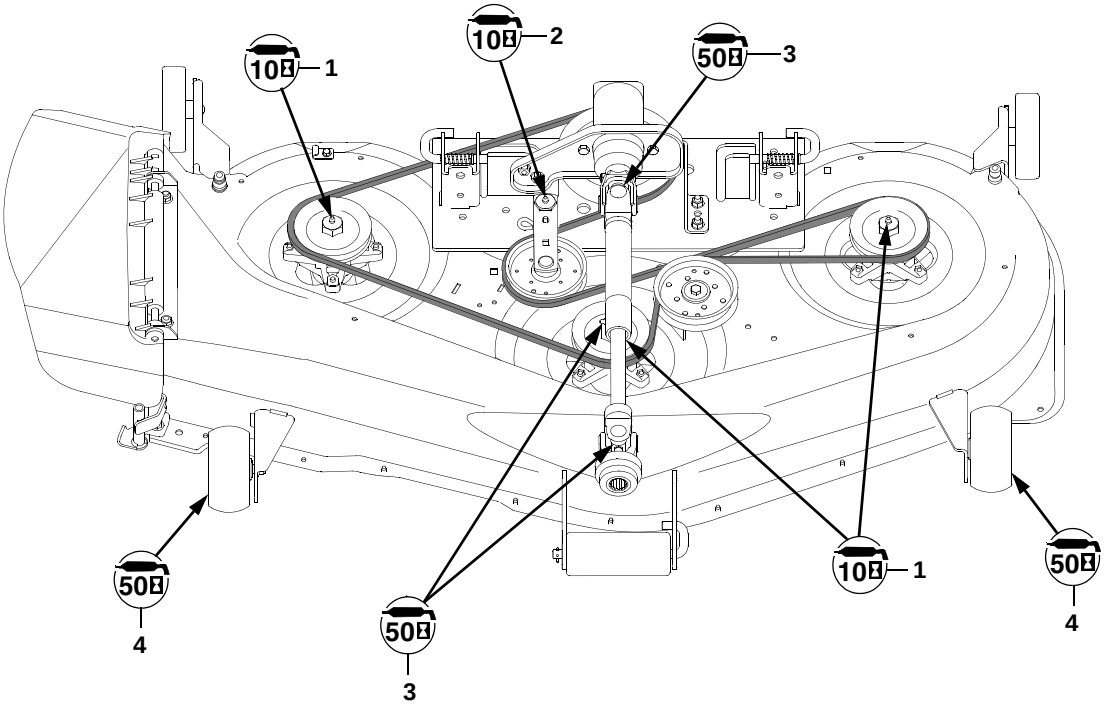
Lubricant is cheap. Use plenty of it. Worn parts can be expensive to replace.

Keep your supply of lubricating oil and grease stored in clean containers, and covered to protect from dust and dirt.

Keep the lubricating gun nozzle clean and wipe dirt from the grease fittings before lubricating.

The symbols in the illustrations indicate the method of application and the hourly intervals to apply the lubricant.

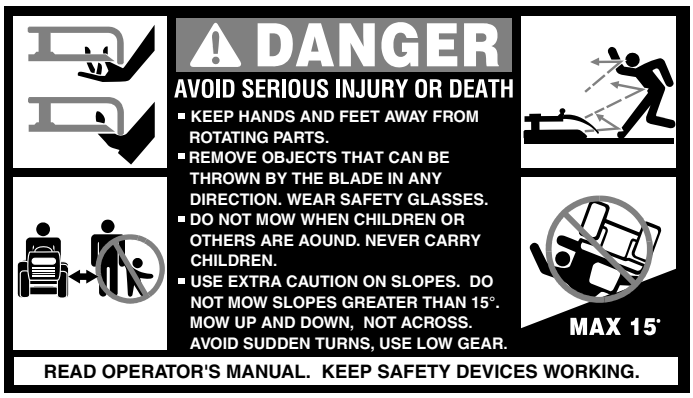
Use a pressure lubricating gun and apply 251H EP grease (or equivalent No. 2 multi-purpose lithium grease) sufficient to flush out the old grease and dirt. Lubricate at the hourly intervals indicated on the symbols.



1. **Deck Spindles — Every 10 Hours of Operation**
2. **Idler Bracket — Every 10 Hours of Operation**
3. **Deck Drive Shaft — Every 50 Hours of Operation**
4. **Front Gauge Wheels — Every 50 Hours of Operation**

PRODUCT GRAPHICS

Keep safety product graphics (decals) clean. Replace any safety graphic that is damaged, destroyed, missing, painted over or can no longer be read. Replacement safety graphics are available through your dealer.


DANGER
AVOID SERIOUS INJURY OR DEATH
▪ KEEP HANDS AND FEET AWAY FROM ROTATING PARTS.
▪ REMOVE OBJECTS THAT CAN BE THROWN BY THE BLADE IN ANY DIRECTION. WEAR SAFETY GLASSES.
▪ DO NOT MOW WHEN CHILDREN OR OTHERS ARE AOUND. NEVER CARRY CHILDREN.
▪ USE EXTRA CAUTION ON SLOPES. DO NOT MOW SLOPES GREATER THAN 15°. MOW UP AND DOWN, NOT ACROSS. AVOID SUDDEN TURNS, USE LOW GEAR.
MAX 15°
READ OPERATOR'S MANUAL. KEEP SAFETY DEVICES WORKING.

DECK SAFETY GRAPHIC – LOCATED ON LEFT SIDE OF MOWER DECK

DANGER
KEEP HANDS AND FEET AWAY. DO NOT OPERATE MOWER UNLESS CHUTE DEFLECTOR OR ENTIRE GRASS CATCHER IS IN ITS PROPER PLACE.
ASSEMBLE CHUTE DEFLECTOR TO THIS UNIT BEFORE OPERATING.

DEFLECTOR and SAFETY GRAPHIC – LOCATED ON RIGHT SIDE OF DECK

T O REDUCE THE RISK OF INJURY, DO NOT OPERATE MOWER UNLESS DISCHARGE CHUTE COVER OR GRASS CATCHER IS IN ITS PROPER PLACE.
DANGER
KEEP HANDS and FEET AWAY

HANDS AND FEET SAFETY GRAPHIC – LOCATED ON DEFLECTOR CHUTE

MANUFACTURER'S LIMITED WARRANTY FOR:

Cub Cadet®

The limited warranty set forth below is given by Cub Cadet LLC with respect to new merchandise purchased and used in the United States, its possessions and territories.

Cub Cadet LLC warrants this product against defects for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any accessory or attachment not approved by Cub Cadet LLC for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear parts or component failures will be covered on the product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear part failures will be covered ONLY IF caused by defects in materials or workmanship of OTHER component parts. Normal wear parts and components include, but are not limited to: batteries, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates, auger spiral rubber, and tires.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE, through your local authorized service dealer. To locate the dealer in your area, check your Yellow Pages, or contact Cub Cadet LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-877-282-8684, or log on to our Web site at www.cubcadet.com.

This limited warranty does not provide coverage in the following cases:

a. The engine or component parts thereof. These items carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions.
b. Log splitter pumps, valves, and cylinders have a sepa rate one year warranty.
c. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.
d. Cub Cadet LLC does not extend any warranty for products sold or exported outside of the United States, its possesions and territories, except those sold through Cub Cadet LLC's authorized channels of export distribution.
e. Parts that are not genuine Cub Cadet parts are not covered by this warranty.
f. Service completed by someone other than an authorized service dealer is not covered by this warranty.
g. Transportation charges and service calls are not covered.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Cub Cadet LLC. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. Cub Cadet LLC shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

HOW STATE LAW RELATES TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.